



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/821,949

04/12/2004

John Martin

250727US8

2349

22850

7590

11/02/2006

C. IRVIN MCCLELLAND
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

VAUTROT, DENNIS L

ART UNIT

PAPER NUMBER

2167

DATE MAILED: 11/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/821,949	Applicant(s) MARTIN ET AL.	
	Examiner Dennis L. Vautrot	Art Unit 2167	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 4/12/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/20/04 & 10/22/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statements (IDS) submitted on 20 October 2004 and 22 October 2004 have been received and entered into the record. Since the IDS comply with the provisions of MPEP § 609, the references cited therein have been considered by the examiner. See attached form PTO-1449.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 2 – 8, 14, 17, 20, 22 – 23, 25 – 27, 38 – 39, 42 – 44 and 47 – 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Maxham et al.** (hereinafter **Maxham**, US 2004/0187075) in view of **Koppich** (US 2005/0141028).

4. Regarding claims 2, 47, and 48 **Maxham** teaches a method of, system for, and computer program product for profiling electronically-stored data, comprising: accessing data from one or more data archives, said one or more data archives located on one or more electronic archive devices (See page 3, paragraph [0034] "If in electronic form, a suitable drive 26 corresponding to the medium type is used to upload electronic documents to the computer system 10.");

transferring a file from said accessed data to a working electronic folder (See page 2, paragraph [0035] "First, data is loaded into the computer system 10 via workstation 12.");

tagging the working electronic folder with folder meta-data (See page 5, paragraph [0049] "FIG 6c shows the attribute menu. Here, various attributes may be assigned to documents selected.");

converting said selected file (See page 3, paragraph [0037] "After the documents to be uploaded have been de-duplicated, extractor 220, converts each native document..."), said step of converting including

extracting file meta-data from said selected file into a corresponding meta-data file (See page 3, paragraph [0037] "Other files that may be generated include meta data files 226..."),

extracting a user-selectable portion of text from said selected file into a corresponding selected text file (See page 3, paragraph [0037] "After the documents to be uploaded have been de-duplicated, extractor 220, converts each native document 222 (corresponding to the input files in original format) to at least a text file 224."),

creating an image of said selected file (See page 3, paragraph [0037] "Other files that may be generated included meta data files, XML files, and HTML files. Well known third party software packages may be used in this conversion process." A document converted to an HTML file can be considered an image of the selected file. Also, some of the third party software packages referred to in the reference include things such as pdf type images of the files.), and

appending the corresponding meta-data file to said image of said selected file to create an appended image file. (See page 3, paragraph [0038] "Indexer 232 creates a file association table for each native document that maintains the association between each native document 222, converted documents 224-230, and attachments, if any, to the native documents.")

Maxham does not explicitly disclose processing the contents of said electronic folder, said step of processing including identifying whether a file within said electronic folder can be converted; and selecting a file that can be converted in said processing step. However, **Koppich** discloses processing the contents of said electronic folder, said step of processing including identifying whether a file within said electronic folder can be converted (See page 4, paragraph [0044] "...the document management system includes means adapted for determining whether the selected operations or script are able to be executed."); and selecting a file that can be converted in said processing step (See page 5, paragraph [0047] "...converting any documents in the data storage area from a first selected file format to a selected second selected file format...").

It would have been obvious to one with ordinary skill in the art at the time of the invention to combine the teachings of **Maxham** with that of **Koppich** because both are related to document management systems and by including the ability to determine which files can be converted as disclosed in **Koppich**, the method is better able to process the files by not trying to convert certain types of files that are not able to be converted. It is for this reason that one of ordinary skill in the art would have been motivated to include processing the contents of said electronic folder, said step of

Art Unit: 2167

processing including identifying whether a file within said electronic folder can be converted and selecting a file that can be converted in said processing step.

5. Regarding claim 3, the combination of **Maxham** and **Koppich** disclose exporting one of said appended image file and said selected text file. (See **Maxham** page 5, paragraph [0052] "When a user selects the document the converted text, html, or xml file is displayed." And see FIGS. 10a-b, showing the exporting of the files to a viewer in the form of a web browser.)

6. Regarding claim 4, the combination of **Maxham** and **Koppich** disclose a step of: displaying one of said steps of accessing, transferring, tagging, processing, selecting, and converting. (See **Maxham** page 5, paragraph [0048] "FIG. 5 illustrates an example of a webpage displayed when the My Files tab 418 has been selected. As shown, both user-associated files, as well as files categorized in public folders." And see **Maxham** page 5, paragraph [0054] "Also displayed are links 1014 to children files, i.e., files that were attached to the native document, which the user may select.")

7. Regarding claim 5, the combination of **Maxham** and **Koppich** disclose displaying a series of parent-child relationships between a file and an attachment to said file. (See **Maxham** page 3, paragraph [0038] "Indexer 232 creates a file association table for each native document that maintains the association between each native document 222,

Art Unit: 2167

converted documents 224-230, and attachments, if any, to the native documents.

These attachments commonly referred to as 'children files'.")

8. Regarding claim 6, the combination of **Maxham** and **Koppich** disclose said attachment comprises: a second attachment to said attachment. (See **Maxham** page 3, paragraph [0038] "Indexer 232 creates a file association table for each native document that maintains the association between each native document 222, converted documents 224-230, and attachments, if any, to the native documents." The two attachments are the converted documents and any other attachments, as mentioned in the above quotation.)

9. Regarding claim 7, the combination of **Maxham** and **Koppich** additionally discloses said folder metadata comprises: date created, last date opened, last date modified, creator name, matter name, and predetermined identification and quality control data. (See **Koppich** page 5, paragraph [0056] "The search criteria includes at least one of keywords, indices, electronic document size, electronic document creation date, electronic document name, electronic document content, and electronic document creator name.")

10. Regarding claim 8, the combination of **Maxham** and **Koppich** additionally discloses said step of processing further comprises: identifying a duplication within said working electronic folder. (See **Maxham** page 2, paragraph [0013] "The computer is

configured to...eliminate duplicate native documents based on the unique identification tags, for producing a subset of input files to be uploaded to the plurality of computer nodes.”)

11. Regarding claim 14, the combination of **Maxham** and **Koppich** additionally discloses said step of identifying a duplication comprises: identifying said duplication by a hash or another unique identifier. (See **Maxham** page 3, paragraph [0036] “Well known cryptographic algorithms, such as the MD5 checksum, may be used to create a fingerprint unique to each file.” MD5 is a hash algorithm.)

12. Regarding claim 17, the combination of **Maxham** and **Koppich** additionally discloses said step of identifying a duplication comprises: identifying a duplication by an MD5 hash algorithm. (See **Maxham** page 3, paragraph [0036] “Well known cryptographic algorithms, such as the MD5 checksum, may be used to create a fingerprint unique to each file.” MD5 is a hash algorithm.)

13. Regarding claim 20, the combination of **Maxham** and **Koppich** additionally discloses said step of converting comprises one of: creating a searchable master text file [index] containing the contents of all selected files; time stamping or digitally authenticating the searchable master text file; and appending selected meta-data about the files included in the master text file. (See **Maxham** page 2, paragraph [0014] “...each of a plurality of documents having at least one of either meta-data text or

Art Unit: 2167

attachments identified for retrieval that are indexed for web based retrieval from the cluster database, said identification of the plurality of documents forming a cluster data base that is web-searchable by use of a predetermined descriptive term.”)

14. Regarding claim 22, the combination of **Maxham** and **Koppich** additionally discloses said step of extracting selected file meta-data comprises: extracting one of file content data, content header information, file meta-data, file type information, and file characteristic data. (See **Maxham** page 3, paragraph [0035] “Next, the file type discriminator determines file types based on the file extension of each input file...Again, the file type of the extracted documents are determined by the file type discriminator.”)

15. Regarding claim 23, the combination of **Maxham** and **Koppich** additionally discloses said selected file meta-data comprises: predetermined categories of meta-data corresponding to a file-type. (See **Maxham** page 4, paragraph [0046] “The attribute table may be created by the file type categorizer 216 of FIG. 2 when uploading native documents.”)

16. Regarding claim 25, the combination of **Maxham** and **Koppich** additionally discloses said step of extracting a user-selectable portion of text comprises: creating an ASCII file of said user-selectable portion of text. (See **Maxham** page 2, paragraph [0014] “...where each document is identified by its file extension that is converted to ASCII text and given a unique identification number...”)

17. Regarding claim 26, the combination of **Maxham** and **Koppich** additionally discloses said step of extracting a user-selectable portion of text further comprises: converting said image of said selected file to text with an OCR program if an ASCII file cannot be created. (See **Koppich** page 5, paragraph [0051] "The OCR operation extracts text from image format documents received into the selected data storage area, performs optical character recognition on such documents, and converts them to text...")

18. Regarding claim 27, the combination of **Maxham** and **Koppich** additionally discloses said step of extracting a user-selectable portion of text comprises: searching for a key word. (See **Koppich** page 5, paragraph [0056] "The search criteria include at least one of keywords, indices, electronic document size, electronic document content, and electronic document creator.")

19. Regarding claim 38, the combination of **Maxham** and **Koppich** additionally discloses said step of creating an image of said selected file comprises: imaging with a TIFFing driver. (See **Koppich** page 5, paragraph [0050] " Preferably, the documents are able to be converted from ...PS to TIFF...")

20. Regarding claim 39, the combination of **Maxham** and **Koppich** additionally discloses said step of exporting comprises: exporting [displaying] to at least one of an

Art Unit: 2167

image viewer, a printer, and a computer configured to search the corresponding meta-data or a master file text content. (See **Maxham** page 5, paragraph [0052] "When a user selects the document, the converted text, html, or xml file is displayed")

21. Regarding claim 42, the combination of **Maxham** and **Koppich** additionally discloses said step of accessing comprises: pre-filtering said data with pre-filtering criteria. (See **Maxham** page 3, paragraph [0035] "Next, the file type discriminator 212 determines file types based on the file extension of each input file 210. If the file is an archive, such as .zip, .tar, etc, archive extractor 214 extracts archived file(s)..." Here, the filtering is based on the file type.)

22. Regarding claim 43, the combination of **Maxham** and **Koppich** additionally discloses said step of pre-filtering comprises: pre-filtering based on file content, content header information, file meta-data, file type, or other criteria identified by the user. (See **Maxham** page 3, paragraph [0035] "Next, the file type discriminator 212 determines file types based on the file extension of each input file 210. If the file is an archive, such as .zip, .tar, etc, archive extractor 214 extracts archived file(s)..." Here, the filtering is based on the file time.)

23. Regarding claim 44, the combination of **Maxham** and **Koppich** additionally discloses said step of pre-filtering comprises: saving said pre-filtering criteria. (See **Maxham** page 4, paragraph [0042] "Also, document classifications may be assigned to each document on the same scale. Therefore, only documents that have document

classification equal to or less than the user's predefined permission level may be viewed by the user." Here, the filtering is the document permissions, and they are stored in the table as shown.)

24. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Maxham** in view of **Koppich** as applied to claim 2 above, and further in view of **Shaughnessy et al.** (hereinafter **Shaughnessy**, US 2004/0205664).

25. Regarding claim 9, **Maxham** and **Koppich** teach a method substantially as claimed. **Maxham** and **Koppich** fail to explicitly disclose said step of processing further comprises: marking a file that cannot be converted as an exception file. However, **Shaughnessy** discloses said step of processing further comprises: marking a file that cannot be converted as an exception file. (See page 26, paragraph [0435] "If the Verity code 454 is unable to convert the selected file to HTML, a server exception will be thrown, and a helpful error message displayed in the user's Netscape browser 12.") It would have been obvious to one with ordinary skill in the art at the time of the invention to combine **Maxham** and **Koppich** with that of **Shaughnessy** because all three are related to document management and by adding the exception as disclosed in **Shaughnessy**, the method is able to handle files that are not automatically convertible, without failing. It is for this reason that one of ordinary skill in the art would have been motivated to include said step of processing further comprises: marking a file that cannot be converted as an exception file.

26. Regarding claim 10, the combination of **Maxham, Koppich and Shaughnessy** discloses said step of transferring comprises: transferring via a drag-and-drop user interface comprising one of a computer mouse and a pointing device. (See **Shaughnessy** page 23, paragraph [0362] "2. User selects an existing PowerPoint 97 (.PPT) file from the local hard drive and drags/drops it into the upload control.")

27. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Maxham and Koppich** as applied to claim 2 above, and further in view of **Howard** (US 6,098,079). **Maxham and Koppich** teach a method substantially as claimed. **Maxham and Koppich** fail to explicitly disclose a time-stamped audit file [journal file] configured to record a file history spanning file creation to file destruction. However, **Howard** discloses a time-stamped audit file configured to record a file history spanning file creation to file destruction. (See column 2, lines 48 – 52 and column 2 line 65 – column 3 line 4 "The reconciliation technique uses a set of journal files in which the history of file creation, modification, and deletion throughout the system is recorded, each journal file maintaining the portion of the history involving a particular site, or storage location....The process generally works by 'merging' the sequences of version entries in each journal to reconstruct the creation/modification/deletion history for each file at the involved sites. Dates and time values, referred to as 'timestamps', in the journal entries are used in this merging process to place the events from the different journals in order.") It would have been obvious to one with ordinary skill in the art at the time of the invention to combine **Maxham and Koppich** with that of **Howard** because all three

references are related to document management between different file systems and by including the audit file and time stamping as disclosed in Howard, the method is able to better track the various files for a more efficient method. It is for this reason that one of ordinary skill in the art would have been motivated to include a time-stamped audit file [journal file] configured to record a file history spanning file creation to file destruction.

28. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Maxham** and **Koppich** as applied to claim 2 above, and further in view of **Chi** (US 5,978,917). **Maxham** and **Koppich** teach a method substantially as claimed. **Maxham** and **Koppich** fail to explicitly disclose said step of processing further comprises one of: checking a file for a virus; removing said virus from said file; checking said file for encoding or encryption; decoding or decrypting said file. However, **Chi** discloses said step of processing further comprises one of: checking a file for a virus; removing said virus from said file; checking said file for encoding or encryption; decoding or decrypting said file. (See column 3, lines 20 – 22 “The present invention provides a generic method for identifying the presence of macro viruses and for eliminating those viruses from infected documents.”) It would have been obvious to one with ordinary skill in the art at the time of the invention to combine the teachings of **Maxham** and **Koppich** with that of **Chi** because the types of files that are managed by **Maxham** and **Koppich** frequently contain macros that can contain viruses, and by including the virus detection and removal as disclosed in **Chi**, the files can keep the method from becoming corrupt and allowing only clean files to be managed. It is for this reason that one of ordinary skill in the art would have been motivated to include said step of processing further

comprises one of: checking a file for a virus; removing said virus from said file; checking said file for encoding or encryption; decoding or decrypting said file.

29. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Maxham** and **Koppich** as applied to claim 2 above, and further in view of **Kumashio** (US 2004/0193631) and in view of **Howard**. **Maxham** and **Koppich** teach a method substantially as claimed. **Maxham** and **Koppich** fail to explicitly disclose said step of processing further comprises: performing page estimation and time stamping/digital authentication of said electronic folder. However **Kumashio** discloses said step of processing further comprises: performing page estimation (See page 10, paragraph [0250] "Thus, data concerning documents (IDs of the documents, names of the documents, the number of pages of each document and thumbnails of the documents) stored in the folders selected by a user from the folders displayed in the region V1 of the page is managed for each document.") It would have been obvious to one with ordinary skill in the art to combine the teachings of **Maxham** and **Koppich** with that of **Kumashio** because all three are related to document management and by including the page estimation as disclosed in **Kumashio**, the user is able to determine approximately how much relevant information is located in the folder, becoming more useful to the user. It is for this reason that one of ordinary skill in the art would have been motivated to include said step of processing further comprises: performing page estimation.

Also, **Howard** discloses time stamping/digital authentication of said electronic folder. (See column 2, lines 48 – 52 and column 2 line 65 – column 3 line 4 "The

reconciliation technique uses a set of journal files in which the history of file creation, modification, and deletion throughout the system is recorded, each journal file maintaining the portion of the history involving a particular site, or storage location....The process generally works by 'merging' the sequences of version entries in each journal to reconstruct the creation/modification/deletion history for each file at the involved sites. Dates and time values, referred to as 'timestamps', in the journal entries are used in this merging process to place the events from the different journals in order.") It would have been obvious to one with ordinary skill in the art at the time of the invention to combine **Maxham**, **Koppich**, and **Kumashio** with that of **Howard** because all of the references are related to document management between different file systems and by including the time stamping as disclosed in **Howard**, the method is able to better track the various files for a more secure method. It is for this reason that one of ordinary skill in the art would have been motivated to include time stamping/digital authentication of said electronic folder.

30. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Maxham** in view of **Koppich** in view of **Shaughnessy** as applied to claim 9 above, and further in view of **Riss et al.** (hereinafter **Riss**, US 2004/0103367).

31. Regarding claim 15, **Maxham**, **Koppich**, and **Shaughnessy** teach a method substantially as claimed. **Maxham**, **Koppich**, and **Shaughnessy** do not explicitly disclose said file that cannot be processed comprises one of: a file with a virus; an

Art Unit: 2167

encrypted file; an unknown file-type; and a deselected file. However, **Riss** discloses said file that cannot be processed comprises one of: a file with a virus; an encrypted file; an unknown file-type; and a deselected file [remove some files from the list]. (See page 4, paragraph [0060] "A list box (418) may be provided to view all the files that are attached by the user. The user can then choose to remove some files from the list (416) if there has been a mistake made by the user. Some document types such as .vbs, .exe will be restricted to avoid any unknown file types or virus files getting into the system.") It would have been obvious to one with ordinary skill in the art at the time of the invention to combine the teachings of **Maxham**, **Koppich**, and **Shaughnessy** with that of **Riss** because they are all related to document management or processing and by including the disclosure of **Riss**, the method is more stable and efficiently by excluding the types of files that are not recognized or harmful. It is for this reason that one of ordinary skill in the art would have been motivated to include said file that cannot be processed comprises one of: a file with a virus; an encrypted file; an unknown file-type; and a deselected file.

32. Regarding claim 16, the combination of **Maxham**, **Koppich**, **Shaughnessy**, and **Riss** additionally discloses said step of marking a file that cannot be converted comprises one of: logging said exception file; and exporting said exception file. (See **Riss** Page 8, paragraph [0171] "Exception messages will be sent out to the Event Log and failed document processing will land up in the Suspended Queue.")

33. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Maxham** in view of **Koppich** as applied to claim 8 above, and further in view of **Eagle et al.** (hereinafter **Eagle**, US 2003/0145209). **Maxham** and **Koppich** teach a method substantially as claimed. **Maxham** and **Koppich** do not explicitly disclose said step of identifying a duplication comprises: checking a duplicate file for a file corruption; and deleting or exporting a corrupted duplicate file. However, **Eagle** discloses said step of identifying a duplication comprises: checking a duplicate file for a file corruption [validating]; and deleting or exporting a corrupted duplicate file. (See page 4, paragraph [0048] "...validating original files and/or duplicate files, culling (deleting) files that should not be included in the final duplicates repository...") It would have been obvious to one with ordinary skill in the art at the time of the invention to combine the teachings of **Maxham** and **Koppich** with that of **Eagle** because the references are all related to document processing and by including the file corruption and deletion as disclosed in **Eagle**, the method can become more stable by removing files likely to render the system problematic. It is for this reason that one of ordinary skill in the art would have been motivated to include said step of identifying a duplication comprises: checking a duplicate file for a file corruption; and deleting or exporting a corrupted duplicate file.

34. Claim 19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Maxham** and **Koppich** as applied to claim 2 above, and further in view of **Howard**.

Art Unit: 2167

35. Regarding claim 19, **Maxham** and **Koppich** teach a method substantially as claimed. **Maxham** and **Koppich** do not explicitly disclose said step of converting comprises one of: time stamping and digitally authenticating both the image and the file of extracted meta-data. However, **Howard** discloses said step of converting comprises one of: time stamping and digitally authenticating both the image and the file of extracted meta-data. (See column 2, lines 48 – 52 and column 2 line 65 – column 3 line 4 “The reconciliation technique uses a set of journal files in which the history of file creation, modification, and deletion throughout the system is recorded, each journal file maintaining the portion of the history involving a particular site, or storage location....The process generally works by ‘merging’ the sequences of version entries in each journal to reconstruct the creation/modification/deletion history for each file at the involved sites. Dates and time values, referred to as ‘timestamps’, in the journal entries are used in this merging process to place the events from the different journals in order.”) It would have been obvious to one with ordinary skill in the art at the time of the invention to combine **Maxham** and **Koppich** with that of **Howard** because all of the references are related to document management between different file systems and by including the time stamping as disclosed in **Howard**, the method is able to better track the various files for a more secure method. It is for this reason that one of ordinary skill in the art would have been motivated to include said step of converting comprises one of: time stamping and digitally authenticating both the image and the file of extracted meta-data.

36. Regarding claim 21, the combination of **Maxham**, **Koppich**, and **Howard** additionally discloses said step of creating a searchable master text file comprises: creating one or more searchable subordinate text files containing the contents of an operator-selected [identified for retrieval] subset of the selected files (See **Maxham** page 2, paragraph [0014] "...each of a plurality of documents having at least one of either meta-data text or attachments identified for retrieval...");

time stamping or digitally authenticating the one or more subordinate text files (See **Howard** column 2, lines 48 – 52 and column 2 line 65 – column 3 line 4 "The reconciliation technique uses a set of journal files in which the history of file creation, modification, and deletion throughout the system is recorded, each journal file maintaining the portion of the history involving a particular site, or storage location....The process generally works by 'merging' the sequences of version entries in each journal to reconstruct the creation/modification/deletion history for each file at the involved sites. Dates and time values, referred to as 'timestamps', in the journal entries are used in this merging process to place the events from the different journals in order.") and

appending selected meta-data about the files included in the subordinate text files. (See **Maxham** page 2, paragraph [0014] "...having at least one of either meta-data text or attachments...")

37. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Maxham** in view of **Koppich** in view of **Howard** as applied to claim 19 above, and further in view of **Gladney** (US 2003/0131241). **Maxham**, **Koppich**, and **Howard** teach

Art Unit: 2167

a method substantially as claimed. **Maxham**, **Koppich**, and **Howard** do not explicitly disclose said step of time stamping comprises: time stamping with one of UTC time and another predetermined time zone. However, **Gladney** discloses said step of time stamping comprises: time stamping with one of UTC time and another predetermined time zone (See page 6, paragraph [0127] "...the timestamp might be encoded as an 8-byte (long) integer that records the last time the value was updated at the primary server that manages the handle value; it might contain elapsed time since 00:00:00 UTC, January 1970 in milliseconds.") It would have been obvious to one with ordinary skill in the art at the time of the invention to combine the teachings of **Maxham**, **Koppich**, and **Howard** with that of **Gladney** because all of the references are related to document profiling and by including the time stamping feature as disclosed in **Gladney**, the method can be more accurate by always having the standard timestamp apply. It is for this reason that one of ordinary skill in the art would have been motivated to include said step of time stamping comprises: time stamping with one of UTC time and another predetermined time zone.

38. Claims 28, 40, 41, 45 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Maxham** and **Koppich** as applied to claim 2 above, and further in view of **Krachman** (US 2004/0199555).

39. Regarding claim 28, **Maxham** and **Koppich** teach a method substantially as claimed. **Maxham** and **Koppich** do not explicitly disclose said step of extracting a user-

Art Unit: 2167

selectable portion of text comprises: extracting a portion of text around said keyword.

However, **Krachman** discloses said step of extracting a user-selectable portion of text

comprises: extracting a portion of text around said keyword. (See page 6, paragraph

[0132] "The first item on that hit list will be displayed in the third portion of the screen in

a format that showed 30-40 words around highlighted text illustrating the words the

search agent found responsive to the query.") It would have been obvious to one with

ordinary skill in the art to combine **Maxham** and **Koppich** with that of **Krachman**

because the references are all related to electronic document processing, and by

including the extracting teachings as disclosed in **Krachman**, the method becomes

more robust by not just extracting the keyword, but extracting the word in context. It is

for this reason that one of ordinary skill in the art would have been motivated to include

said step of extracting a user-selectable portion of text comprises: extracting a portion of

text around said keyword.

40. Regarding claim 40, the combination of **Maxham**, **Koppich** and **Krachman**

additionally discloses said step of exporting comprises: exporting a file comprising a

predetermined litigation support software file type. (See **Krachman** page 7, paragraph

[0142] "The trained smart agents can be used to extract text and other information from

almost anything: they can burrow through ...all ODBC-compliant databases such as

Access, Oracle..." Here, Access is the litigation support software.)

Art Unit: 2167

41. Regarding claim 41, the combination of **Maxham, Koppich and Krachman** additionally discloses said predetermined litigation support software file type comprises one of: an IPRO file type, an Opticon file type, a Concordance file type, a Summation file type, a Ringtail file type, a Microsoft Access file type, and a data management file type. (See **Krachman** page 7, paragraph [0142] "The trained smart agents can be used to extract text and other information from almost anything: they can burrow through ...all ODBC-compliant databases such as Access, Oracle..." Here, Access is the litigation support software.)

42. Regarding claim 45, the combination of **Maxham, Koppich and Krachman** additionally discloses said step of accessing comprises: accessing an email or instant messaging archive. (See **Krachman** page 2, paragraph [0045] and [0046] "Active E-mail systems and attachments...Archived documents and E-mail...")

43. Regarding claim 46, the combination of **Maxham, Koppich and Krachman** additionally discloses said step of accessing an email or instant message archive comprises: accessing a printable attachment of an email or instant message. (See **Krachman** page 2, paragraph [0045] and [0046] "Active E-mail systems and attachments...Archived documents and E-mail...")

44. Claims 29 – 32 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Maxham** and **Koppich** as applied to claim 2 above, and further in view of **Kenner et al.** (hereinafter **Kenner**, US 6,421,726).

45. Regarding claim 29, **Maxham** and **Koppich** teach a method substantially as claimed. **Maxham** and **Koppich** do not explicitly disclose said step of processing comprises: processing with a prioritization scheme keyed to file type. However, **Kenner** discloses said step of processing comprises: processing with a prioritization scheme keyed to file type. (See column 18, lines 39 – 42 “The CODECs are specified in the script in a prioritized order. If the first-listed CODEC is installed on the user terminal, it will be used. If only a lower-listed CODEC is installed, it will be used instead.”) It would have been obvious to one with ordinary skill in the art at the time of the invention to combine the teachings of **Maxham** and **Koppich** with that of **Kenner** because all three references are related to processing data for use and by including the prioritization scheme keyed to the file type, as disclosed in **Kenner**, the proper processor will be invoked based on the order set by the user, creating an efficient method for the most accurate processing. The fact that **Kenner** is related to multimedia streams rather than text and static image files as in the other two references is not relevant, since the goal of all three references is to process the files in the most efficient way. It is for this reason that one of ordinary skill in the art would have been motivated to include said step of processing comprises: processing with a prioritization scheme keyed to file type.

46. Regarding claim 30, the combination of **Maxham, Koppich, and Kenner** additionally discloses said step of processing with a prioritization scheme comprises: processing with a plug-in module. (See **Kenner** column 20, lines 9 – 12 “The EMBED statement also specifies parameters to be used by the plug-in for format selection. The plug-in retrieves those parameters comprising a prioritized list of preferred CODECs and file type extensions.” In other words the plug-in contains the list of extensions related to the prioritized way to process the file type.)

47. Regarding claim 31, the combination of **Maxham, Koppich, and Kenner** additionally discloses said step of processing with a plug-in module comprises: processing with a plug-in module configured to be selected to be ‘ON’ or ‘OFF.’ (See **Kenner** column 20, lines 3 – 8 “If the plug-in is already present, or the user has taken the appropriate steps to install it, the plug-in is then invoked by the embedded script.” The plug in would be considered to be “ON” if it is installed, and if not installed, it would be considered to be “OFF”.)

48. Regarding claim 32, the combination of **Maxham, Koppich, and Kenner** additionally discloses said step of processing with a plug-in module comprises: processing with a plug-in module configured to have a user-selectable priority. (See **Kenner** column 19, lines 26 – 28 “In a like manner, different CODEC programs can be selected for use with the different browser environments.” Here, the user selects with plug-in works best for the particular browser and sets the priority accordingly.)

49. Regarding claim 35, the combination of **Maxham**, **Koppich**, and **Kenner** additionally discloses said step of processing with a plug-in module comprises one of: processing with a plug-in configured to open multiple file types (See **Maxham** page 3, paragraph [0035] "If the file type is an archive, such as .zip, .tar, etc., archive extractor extracts archived file(s)." Here, there are multiple file types being processed with the archive extractor.);

processing with multiple plug-ins configured to open a single file-type (See **Kenner** column 19, lines 26 – 28 "In a like manner, different CODEC programs [plug-ins] can be selected for use with different browser environments." In this case, the same file might be processed using different plug-ins depending upon the browser.)

processing with a plug-in created by incorporating a library of a commercially available software product (See **Maxham** page 3, paragraph [0037] "Well known third party software packages may be used in this conversion process."); and

processing with a plug-in comprising a library of programming code that incorporates functionality of a third party library or an application to load, image and extract metadata from a document. (See **Maxham** page 3, paragraph [0037] "Well known third party software packages may be used in this conversion process.")

50. Claims 33 – 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Maxham** in view of **Koppich** and in view of **Kenner** as applied to claim 29 above, and further in view of **Black et al.** (hereinafter **Black**, US 2002/0059317).

51. Regarding claim 33, **Maxham, Koppich, and Kenner** teach a method substantially as claimed. **Maxham, Koppich, and Kenner** do not explicitly disclose said step of processing with a prioritization scheme keyed to file type comprises at least one of: identifying a file type extension; and evaluating a binary file header.

However, **Black** discloses said step of processing with a prioritization scheme keyed to file type comprises at least one of: identifying a file type extension; and evaluating a binary file header. (See page 4, paragraph [0060] "One way to achieve that is to use a combination of file extensions and/or internal binary header information to determine the file type.")

It would have been obvious to one with ordinary skill in the art at the time of the invention to combine the teachings of **Maxham, Koppich, and Kenner** with that of **Black** because all of the references are related to data file processing and by including the teachings of file type extension and binary file header teachings of **Kenner**, the method is able to become more secure and robust by not allowing file types to be ignored because they were improperly changed. It is for this reason that one of ordinary skill in the art would have been motivated to include said step of processing with a prioritization scheme keyed to file type comprises at least one of: identifying a file type extension; and evaluating a binary file header.

52. Regarding claim 34 the combination of **Maxham, Koppich, Kenner, and Black** discloses said step of processing with a prioritization scheme keyed to file type

comprises one of: identifying said file type extension and evaluating the binary header when the file type extension is unknown (See **Black** page 4, paragraph [0060] "Most file contain embedded binary data that can be used to identify the file regardless of the file extension." This means it could determine the type even if the extension was unknown.); and evaluating the binary header, and if there is a conflict between the binary header and the file-type extension, one of the binary header or the file-type extension is considered a default first choice, either arbitrarily or based on a predetermined logic keyed to a predetermined file type. (See **Black** page 4, paragraph [0060] "This is a measure that prevents one from renaming a DOC, XLS, etc. to intentionally hide data or unintentionally omit data files." Here the conflict would exist between the header and the extension. In this case, it appears the reference chooses the information in the header type to be the default first choice.)

53. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Maxham** in view of **Koppich** and in view of **Kenner** as applied to claim 29 above, and further in view of **Mclver** (John Mclver, "AutoVue Solid Model Professional Version 15 – Review" <http://www.cadinfo.net/reviews/AutoVUESolid.htm>, retrieved version dated February 2, 2003). **Maxham**, **Koppich**, and **Kenner** teach a method substantially as claimed. **Maxham**, **Koppich**, and **Kenner** do not explicitly disclose said step of processing with a prioritization scheme keyed to file type comprises: reading a file that is not correlated to a plug-in or a file that cannot be read by a plug-in with an AutoVue plug-in. However, **Mclver** discloses said step of processing with a prioritization scheme

Art Unit: 2167

keyed to file type comprises: reading a file that is not correlated to a plug-in or a file that cannot be read by a plug-in with an AutoVue plug-in. (See page 3, second paragraph "AutoVue claims support for over 190 file formats....a broad range of Vector graphics, Fax, Word Processor, Database and Spreadsheet formats are also covered.") It would have been obvious to one with ordinary skill in the art at the time of the invention to combine the teachings of **Maxham**, **Koppich**, and **Kenner** with that of **Mclver** because they are all related to document processing and by including the AutoVue teachings of **Mclver**, the system becomes more robust by allowing for a wide variety of files to be processed than without AutoVue. It is for this reason that one of ordinary skill in the art would have been motivated to include said step of processing with a prioritization scheme keyed to file type comprises: reading a file that is not correlated to a plug-in or a file that cannot be read by a plug-in with an AutoVue plug-in.

54. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Maxham** in view of **Koppich** in view of **Kenner** and in view of **Mclver** as applied to claim 36 above, and further in view of **Windows Tips** ("Windows Tips – How to create a file association for your programs, using the registry"

http://phi.lho.free.fr/windows_tips/FileAssociations.en.html, dated 3 June 1999).

Maxham, **Koppich**, **Kenner**, and **Mclver** teach a method substantially as claimed.

Maxham, **Koppich**, **Kenner**, and **Mclver** do not explicitly disclose said step of processing with a prioritization scheme keyed to a file type comprises: reading a file that cannot be processed by the AutoVue plug-in by using a Microsoft Windows File Type

Association and accessing a Windows registry to determine if a "print" verb is associated with the extension in windows; if said "print" verb is found to be associated with the extension, starting a new Windows process with said "print" verb as startup information and feeding the output of said new Windows process to an imaging print driver.

However, **Windows Tips** discloses said step of processing with a prioritization scheme keyed to a file type comprises: reading a file that cannot be processed by the AutoVue plug-in by using a Microsoft Windows File Type Association and accessing a Windows registry to determine if a "print" verb is associated with the extension in windows; if said "print" verb is found to be associated with the extension, starting a new Windows process with said "print" verb as startup information and feeding the output of said new Windows process to an imaging print driver. (See page 2, line 10 and 11, where the print verb is associated in the registry to the plug-in wordpad.exe)

It would have been obvious to one with ordinary skill in the art at the time of the invention to combine the teachings of **Maxham**, **Koppich**, **Kenner**, and **McIver** with that of **Windows Tips** because the references are related to document processing and by including the File Type Association disclosure as taught in **Windows Tips**, the method becomes more robust by allowing the registry control to determine what plug-in to use in case it is not previously able to be determined. It is for this reason that one of ordinary skill in the art would have been motivated to include said step of processing with a prioritization scheme keyed to a file type comprises: reading a file that cannot be processed by the AutoVue plug-in by using a Microsoft Windows File Type Association

Art Unit: 2167

and accessing a Windows registry to determine if a "print" verb is associated with the extension in windows; if said "print" verb is found to be associated with the extension, starting a new Windows process with said "print" verb as startup information and feeding the output of said new Windows process to an imaging print driver.

Conclusion

55. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Burrows (5,745,900) discloses removing duplicate pages in an index.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis L. Vautrot whose telephone number is 571-272-2184. The examiner can normally be reached on Monday-Friday 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cottingham can be reached on 571-272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Dv
23 October 2006



JOHN COTTINGHAM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

